



Identifying outcomes - end-user's use of energy services

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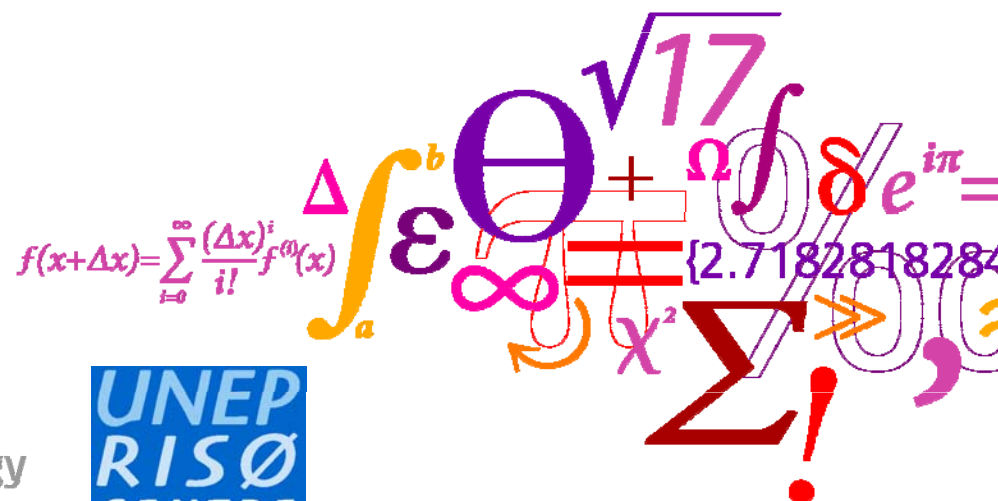
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Identifying "outcomes"

End-users' use of energy services

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“Outcome” as an element of the causal chain

- Input –material, financial, social, institutional, and/or know-how
- Output - often an energy service or an energy vector
- Outcome – improvements attributable to the utilization of energy services. How are end-users affected by improved energy services?
- Impact – similar to outcomes, further downstream, subject to other influences and circumstances

How are end-users affected by improved energy services?

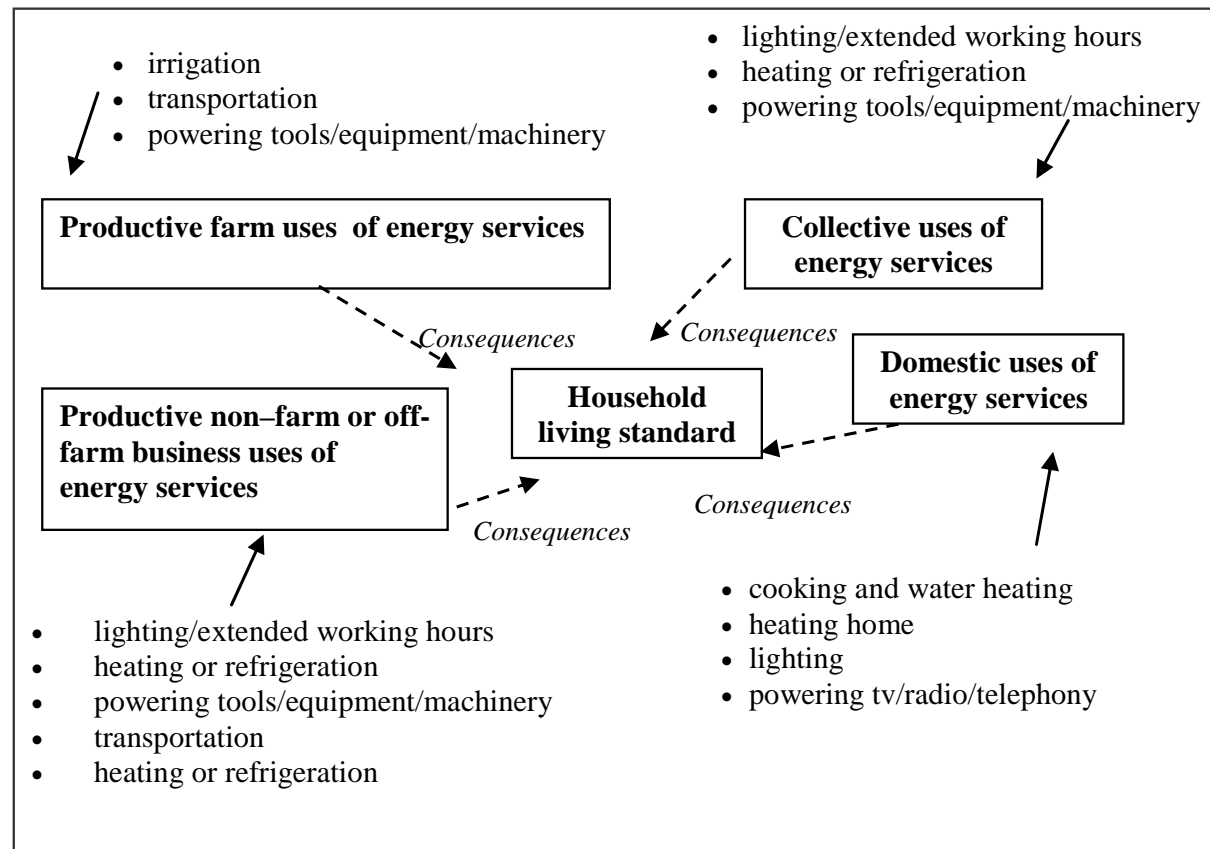
- Answer linked to how well we understand how they use energy services. (Likely to be location specific.)
- Simplify, let's assume all productive/commercial activities are owned by households \Rightarrow ultimately households are the agents affected by access to improved energy services.
- Three common classes of uses are:
 - (i) Domestic,
 - (ii) Collective (e.g. schools, clinics or street lighting)
 - (iii) Productive.
 - farm uses
 - non-farm uses

Improved energy services affect households living standards

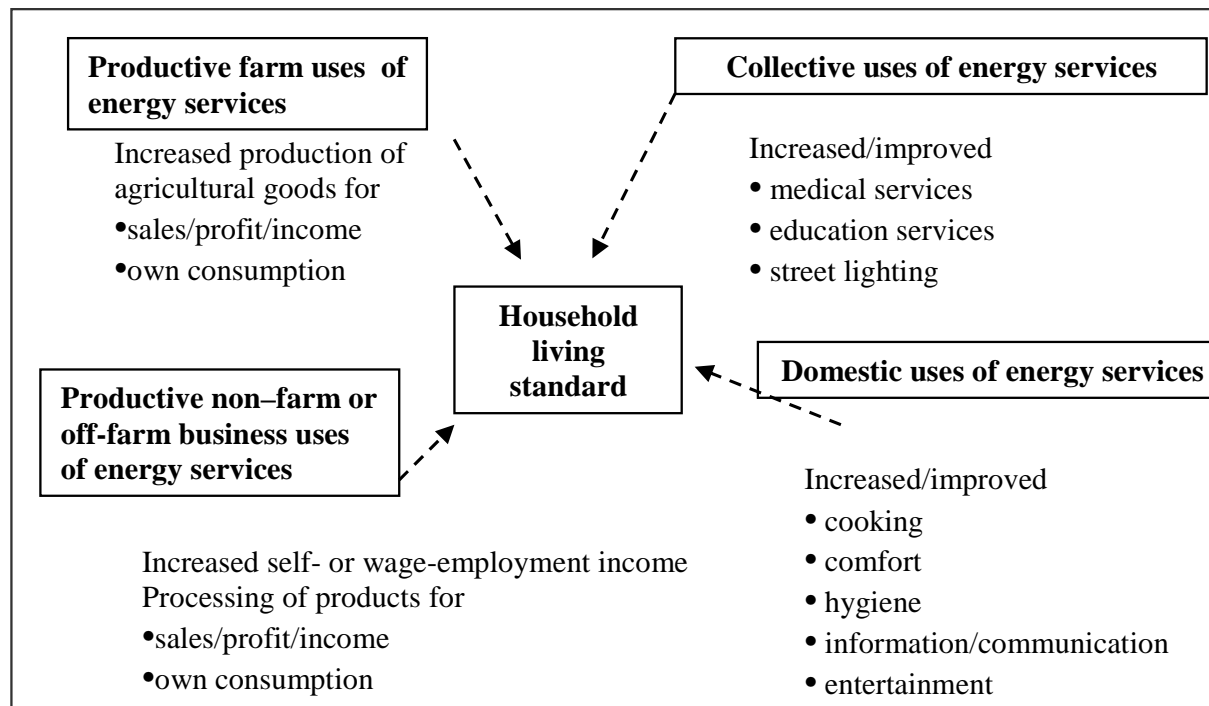
“Living standards” – monetary income, sense of security, connection to outside world, or opportunities to generate their livelihoods

- “Livelihood” - not all income is monetary, how does the household organize itself, or its members, and draw on available resources, so as to meet its various needs?
- We will proceed for now to classify households activities as falling into categories:
 - (i) Domestic,
 - (ii) Collective (e.g. schools, clinics or street lighting)
 - (iii) Productive.
 - farm uses
 - non-farm uses

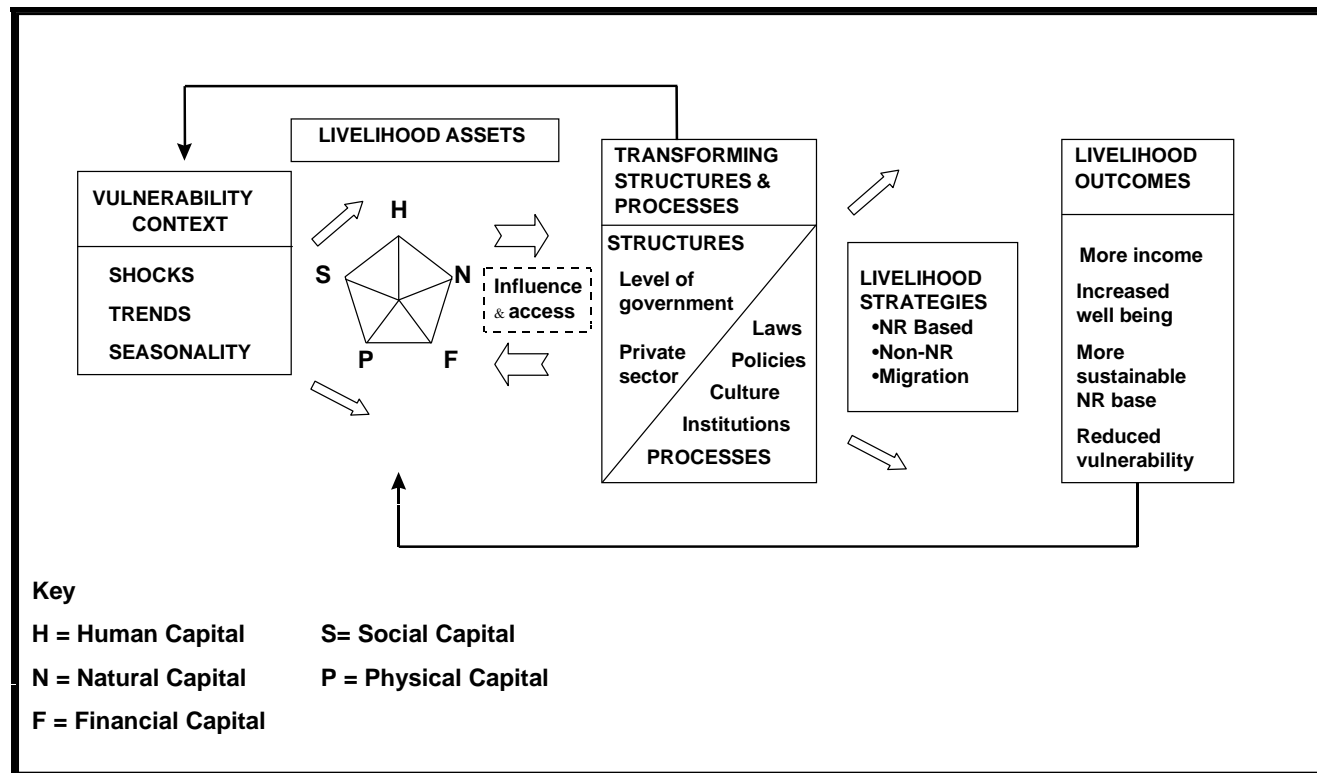
Examples of energy services utilization which have consequences for household living standards



Examples of consequences for household living standards from the utilization of energy services



Sustainable Livelihoods Framework



Afterthoughts on outputs

- Our assessment/evaluation depends crucially on how well we understand end-users use of energy in their "livelihood generation" (not necessarily modelled according to the SL Framework)
- Outcomes may be more interesting in terms of "results" – but the sustainability of outcomes depend crucially on the sustainability of inputs – do not overlook inputs (spares, maintenance, training for usage)